

perpendicularly to its substrate, and which has a low threshold, and can be readily arrayed.

A light emitting diode (LED) is also well known as a light emitting device whose fabrication cost is low and which can be readily implemented. The configuration of such a surface light-emitting-type device is similar to that of a light receiving device, such as a photodiode, which originally receives light at its surface. Therefore, those surface light emitting and receiving devices can be suitably combined, and are hence expected to be applied to an optical interconnection that optically connects boards, modules in a board, and large scale integration (LSI) chips to each other.--

IN THE CLAIMS:

Please cancel Claim 38 without prejudice to or disclaimer of the subject matter recited therein.

Please amend Claims 1 through 6, 11 through 14, 16 through 22, 37, 39, and 40 and add Claim 41 to read, as follows. A marked-up copy of Claims 1 through 6, 11 through 14, 16 through 22, 37, 39, and 40, showing the amendments made thereto, is attached. Note that all the claims currently pending in this application, including those not presently being amended, have been reproduced below for the Examiner's convenience.

- ~~1. (Amended) An optical waveguide comprising:~~
- ~~a partial cylindrical portion having an elongated profile and being formed of~~
- ~~a material transparent to light propagating along said partial cylindrical portion; and~~
- ~~a plurality of end portions, each of said plurality of end portions having an~~
- ~~approximately partial spherical profile smoothly joining said partial cylindrical portion,~~